WHAT IS CLAIMED IS:

1. A method for solving nogood databases, comprising:

generating a representation comprising a plurality of contexted disjunctions;

conjoining all of the contexted disjunctions to form a conjunction of contexted disjunctions; and

storing the representation as the conjunction of contexted disjunctions.

2. The method of claim 1, further comprising eliminating nogoods by refining the representation until a result of the conjunction of contexted disjunctions is backtrack-free or the result of the conjunction of contexted disjunctions reduces to false.

3. The method of claim 2, wherein refining the representation is carried out without reordering the disjunctions.

4. The method of claim 2, wherein refining the representation is carried out without merging the disjunctions.

5. The method of claim 1, further comprising transforming the representation so that the conjunction of contexted disjunctions is backtrack-free.

6. The method of claim 5, wherein transforming the representation is carried out without reordering the disjunctions.

7. The method of claim 5, wherein transforming the representation is carried out without merging the disjunctions.

8. The method of claim 1, further comprising transforming the representation so that choosing any disjunct from each of the disjunctions results in a valid solution.

9. The method of claim 8, wherein transforming the representation is carried out without reordering the disjunctions.

10. The method of claim 8, wherein transforming the representation is carried out without merging the disjunctions.

11. A system for solving nogood databases, comprising:

a storage device that stores a representation comprising a plurality of contexted disjunctions; and

a processor that conjoins all of the contexted disjunctions to form a conjunction of contexted disjunctions and replaces the representation with the conjunction of contexted disjunctions.

12. The system of claim 11, further comprising a processor that eliminates nogoods by refining the representation until a result of the conjunction of contexted disjunctions is backtrack-free or the result of the conjunction of contexted disjunctions reduces to false.

13. The system of claim 11, further comprising a processor that transforms the representation so that the conjunction of contexted disjunctions is backtrack-free.

14. The system of claim 11, further comprising a processor that transforms the representation so that choosing any disjunct from each of the disjunctions results in a valid solution.